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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/007,149	12/05/2001	John R. Schneider	1646A1	1918

7590 02/13/2006
PPG INDUSTRIES, INC.
Intellectual Property Department
One PPG Place
Pittsburgh, PA 15272

EXAMINER

GORR, RACHEL F

ART UNIT PAPER NUMBER

1711

DATE MAILED: 02/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No.

10/007.149

Applicant(s)

SCHNEIDER ET AL.

Examiner

Rachel F. Gott

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13, 15-17, 19-45 and 50-63 is/are pending in the application.
4a) Of the above claim(s) 2-5, 7-9, 13 and 25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 6, 10-12, 15-17, 19-24, 26-45, 50-63 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10-20-05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 6, 10-12, 15-17, 19-24, 26-40, 42-45 and 50-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Christie (6,203,906).

3. Christie discloses powder coatings (col. 1, line 6) comprising 0.05 – 5 wt % calcined unground alumina, calcined alumina, ground alumina and tabular alumina (col. 1, lines 48-53) having particle sizes less than 10 microns (col. 3, line 33). Example 2 shows particle sizes less than three microns (col. 6) and polymethylmethacrylate and a curing agent. This example differs from the claims by not being a powder, by not specifying functional groups on the polymethylmethacrylate or curing agent and by not using more than 5 wt. % alumina. In the other examples, he shows some of the specified functional groups of the claims. Christie is silent of gloss retention properties for the coating.

4. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use more than five wt. % alumina because there's little difference between 5 wt. % and greater than 5 wt. %. It would have been obvious to use polymethylmethacrylate having some of the same functional groups as show in the other examples, such as epoxy, because Christie prefers thermoset resins and the polyacrylate and curing agent would have to cure through some such means. It would have been obvious to use example two as a powder coating because Christie teaches

this application. The gloss retention properties would be the same because the components are the same.

5. Applicant's arguments filed 12-14-05 have been fully considered but they are not persuasive. The applicants argue that Christie doesn't specify that the refractive index of the alumina and resin be close in value. Christie teaches the refractive index of the filler of example 2 as 1.50-1.57 (col. 2, line 35), and Hoffman (3,655,263) shows that the refractive index of alumina is 1.764 and polymethylmethacrylate is 1.48-1.50 (col. 1, lines 55-57). The applicants argue that Christie teaches away from particle sizes of less than three microns. Christie prefers larger particle sizes, but he shows smaller particle sizes in example 2, and there's little difference between particle sizes less than three microns and equal to three microns.

6. Claims 41 and 59063 are rejected under 35 U.S.C. 103(a) as being unpatentable over Christie in view of Harashima (6,362,267).

7. Christie shows the invention of the claims (see above) but differs from these claims by not specifying that the alumina be extruded with all the of the ingredients, but shows it added after extrusion (col. 2, line 42).

8. Harashima discloses making powder coatings in which all the ingredients are extruded together or in which the filler can be added later (col. 3, lines 17-400).

9. It would have been obvious to one of ordinary skill in the art at the time the invention was made to extrude the alumina with the resin in the coating of Christie per the teachings of Harashima because it would enable better mixing and more even particle sizes for the powder.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rachel F. Gorr whose telephone number is 571-272-1072. The examiner can normally be reached on Mon., Tues., Thurs., Fri., from 7:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

R.G.
February 7, 2006


RACHEL GORR
PRIMARY EXAMINER